THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT AND FORESTS (SMT. MANEKA GANDHI): (a) and (b) The thrust of the future programme of Afforestation and Wastelands Development, which includes Social Forestry, is on micro-planning, people's participation and technology extension with special attention being given to regeneration of degraded forests, greening of public/community lands and promotion of farm forestry.

(c) The target for afforestation which includes Social Forestry is 5,50,000 hectares area coverage of Public lands and 225 crores seedling distribution under farm forestry during 1990-91.

Use of Sanskrit Grammar for Developing Machine Translation Programmes

2153. SHRI KRISHAN LAL SHARMA: Will the PRIME MINISTER be pleased to state:

(a) whether Government are aware of the growing interest of computer scientists in USA to use Sanskrit Grammar for developing Machine Translation Programme;

(b) whether there is any scheme to promote use of computers in language education and language based research in Indian languages such as translation, text understanding, text general and phonetics;

(c) if so, what are the targets, budget and estimated achievements during the 8th Five Year Plan;

(d) in what manner the proposal funding compare with that of similar projects abroad; and

(e) if the answer to part (b) above be in the negative, when it is proposed to be planned?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (PROF. M. G.K. MENON): (a) Government is aware of research papers published in USA during 1985 and 1986 which have examined the possibility of using Sanskrit grammar to evolve an appropriate knowledge representation scheme. However, their application in developing practical machine translation system is yet to be established.

(b) Department of Electronics has drawn up a programme entitled Technology Development for Indian Languages (TDIL) for implementation during the Eighth Plan with thrust on the development of learning systems, machine translation systems and human machine interface systems. The activities relating to use of computers in language education and language based research such as translation, text understanding, text generation and phonetics are included in the thrust areas. These all constitute research and not large scale practical application at present.

(c) The main targets and objectives of the programme include the development of authoring systems, language learning systems, especially for slow learners, and those with speech and hearing impairments, limited domain computer assisted translation systems, human-machine interface systems, such as short-hand and character recognition systems, multilingual information display systemts and limited vocabulary speech input-output systems.

An amount of Rs. 17 crores has been proposed for this programme during the 8th Plan; but this is yet o be finalised.

(d) As such multidisciplinary projects involving several languages and scripts are not being executed elsewhere, it is not possible to make any comparision. However, as the expenditure on equipment is limited to Personal Computer family of machines, the funds proposed appear to be small but are adequate to start with for such research.

(e) Does not arise.

Amount for the project of Forests Research Institute, Jodhpur

2154. SHRI B.L. PANWAR: Will the Minister of ENVIRONMENT AND FORESTS be pleased to state:

(a) what is the total amount involved in the project of Forests Research Institute, Jodhpur; and

(b) whether the said institute is functioning with the full sanctioned staff and what are the achievements of the Institute so far?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT AND FORESTS (SMT. MANEKA GANDHI): (a) An amount of Rs. 25 lakhs is provided in the Plan Budget for the institute during the year 1990-91.

(b) This Institute was set up in April, 1988. 48 persons have been appointed against sanctioned strength of 175. Recruitment to the remaining posts is in progress. Eight Research Projects relating to soil, fertilizer and moisture management, insect, pest and termite problems have been initiated during the year 1989-90.

"Damage caused to environment by the use of pesticides"

2155. SHRI MENTAY PADMANABHAM: Will the Minister of ENVIRONMENT AND FORESTS be pleased to state:

(a) whelther any study has been conducted regarding damage caused to environment due to continuous use of various pesticides;

(b) whether the same standards for which DDT has been banned abroad also apply in India; and

(c) what action Government have taken to check the continuing use of pesticides in the country?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRIMATI MANEKA GANDHI): (a) Yes, Sir.

(b) In India, the use of DDT has been banned in agriculture, it continues to be used for vector control. Some countries like USA, Canada, etc. have completely banned DDT.

(c) The Government of India has appointed a Standing Committee to review the implementation of various decisions regarding use of pesticides in the country.

Delay in setting up of Zirconium and Titanium Sponge Plant in Tamil Nadu

2156. SHRI S. MADHAVAN: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that the setting up of Zirconium and Titanium sponge Plants in Palayakayal village in Chidambaranar District in Tamil Nadu has been delayed; and

(b) what steps are being taken to complete the project as scheduled?

THE MINISTER OF STATE IN THE MINISTRY OF DEFENCE (DR. RAJA RAMANNA): (a) No, Sir.

(b) The project proposals are being progressed to obtain financial